

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office			Atty. Docket No. 0575/62166/JPW/MVM		Serial No. 09/654,462				
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)					Applicants Thomas M. Jessell et al.			Filing Date September 1, 2000			
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		Document Number				Date	Country	Class	Subclass	Translation	
										Yes No	
Am2	WO	0	1	8	4	9	3	3	11/15/01	PCT (Exhibit 3);	
Am2	WO	0	2	1	8	5	4	5	03/07/02	PCT (Exhibit 4);	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)											
Am2	U.S. Serial No. 09/569,259, filed May 11, 2000 on behalf of Thomas M. Jessell et al., including pending claims (Exhibit 1);										
	U.S. Serial No. 10/362,437, filed February 20, 2003 on behalf of Thomas M. Jessell et al., including pending claims (Exhibit 2);										
	European Patent Application No. 01968382, filed August 31, 2001, European Publication No. EP1315794, published June 4, 2003 on behalf of The Trustees of Columbia University in the City of New York, including Voluntary Amendment filed March 28, 2003 (Exhibit 5);										
	Campbell, G. et al., (1999) "Transducing the Dpp Morphogen Gradient in the Wing of Drosophila: Regulation of Dpp Targets by brinker", <i>Cell</i> 96: 553-562 (Exhibit 6);										
	Chiang, C. et al., (1996) "Cyclopia and Defective Axial Patterning in Mice Lacking Sonic Hedgehog Gene Function", <i>Nature</i> 383: 407-413 (Exhibit 7);										
✓	Dasen, J.S. et al., (1999) "Combinatorial Codes in Signaling and Synergy: Lessons From Pituitary Development", <i>Curr. Opin. Genet. & Dev.</i> 9: 566-574 (Exhibit 8);										
Am2	Ding, Q. et al., (1998) "Diminished Sonic Hedgehog Signaling and Lack of Floor Plate Differentiation in Gli2 Mutant Mice", <i>Development</i> 125: 2533-2543 (Exhibit 9);										
EXAMINER		Am2 Marie Zalk DATE CONSIDERED 8/30/04									
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Applicants: Thomas M. Jessell et al.
 Serial No.: 09/654,462
 Filed: September 1, 2000
 Exhibit A

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Amz		Doetsch, F. et al., (1999) "Subventricular Zone Astrocytes Are Neural Stem Cells in the Adult Mammalian Brain", <i>Cell</i> 97: 703-716 (Exhibit 10);						
↓		Erskine, L. et al. (1998) "Progenitor Dispersal and the Origin of Early Neuronal Phenotypes in the Chick Embryo Spinal Cord" <i>Dev. Biol.</i> 199: 26-41 (Exhibit 11);						
		Funayama, N. et al. (1999) "Coelom Formation: Binary Decision of the Lateral Plate Mesoderm is Controlled by the Ectoderm" <i>Development</i> 126: 4129-4138 (Exhibit 12);						
		Gage, F.H. (2000) "Mammalian Neural Stem Cells", <i>Science</i> 287:1433-1438 (Exhibit 13);						
		Huang, A.M. et al. (1997) "An Anteroposterior Dorsal Gradient in the Drosophila Embryo", <i>Genes & Dev.</i> 11: 1963-1973 (Exhibit 14);						
		Ingham, P.W. (1998) "Transducing Hedgehog: The Story So Far" <i>EMBO J.</i> 17: 3505-3511 (Exhibit 15);						
↓		Jazwinska, A. et al. (1999) "The Drosophila Gene brinker Reveals a Novel Mechanism of Dpp Target Gene Regulation", <i>Cell</i> 96: 563-573 (Exhibit 16);						
		Johansson, C.B. et al. (1999) "Identification of a Neural Stem Cell in the Adult Mammalian Central Nervous System", <i>Cell</i> 96: 25-34 (Exhibit 17);						
Amz		Kraut, R. et al. (1991) "Spatial Regulation of the Gap Gene giant During Drosophila Development", <i>Development</i> 111: 601-609 (Exhibit 18);						
EXAMINER <i>Amie-Marie Falk</i>		DATE CONSIDERED 8/30/04						
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Amz	Krishnan, V. et al. (1997) "Mediation of Sonic Hedgehog-Induced Expression of COUP-TFII by a Protein Phosphatase", <i>Science</i> 278: 1947-1950 (Exhibit 19);
	Lawrence, P.A. et al. (1996) "Morphogens, Compartments, and Pattern: Lessons from <i>Drosophila</i> ?", <i>Cell</i> 85: 951-961 (Exhibit 20);
	Lewis, K.E. et al. (1999) "Expression of ptc and gli Genes in talpid ³ Suggests Bifurcation in Shh Pathway" <i>Development</i> 126: 2397-2407 (Exhibit 21);
	Mansouri, A. et al. (1998) "Pax3 and Pax7 are Expressed in Commissural Neurons and Restrict Ventral Neuronal Identity in the Spinal Cord", <i>Mech. Dev.</i> 78: 171-178 (Exhibit 22);
	Marti, E. et al. (1995) "Distribution of Sonic Hedgehog Peptides in the Developing Chick and Mouse Embryo", <i>Development</i> 121: 2537-2547 (Exhibit 23);
	Matise, M.P. et al. (1998) "Gli2 is Required for Induction of Floor Plate and Adjacent Cells, But Not Most Ventral Neurons in the Mouse Central Nervous System", <i>Development</i> 125: 2759-2770 (Exhibit 24);
✓	McDowell, N. et al. (1999) "Activin as a Morphogen in <i>Xenopus</i> Mesoderm Induction", <i>Semin. Cell & Dev. Biol.</i> 10: 311-317 (Exhibit 25);
	Minami, M. et al. (1999) "Brinker is a Target of Dpp in <i>Drosophila</i> that Negatively Regulates Dpp-dependent Genes", <i>Nature</i> 398: 242-246 (Exhibit 26);
Amz	Papin, C. et al. (2000) "Gradual Refinement of Activin-Induced Thresholds Requires Protein Synthesis" <i>Dev. Biol.</i> 217: 166-172 (Exhibit 27);

EXAMINER

DATE CONSIDERED

Amel-Marie Jalk

8/30/04

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Am2		Pierani, A. et al. (1999) "A Sonic Hedgehog-Independent, Retinoid-Activated Pathway of Neurogenesis in the Ventral Spinal Cord", <i>Cell</i> 97: 903-915 (Exhibit 28);						
		Roelink, H. et al. (1995) "Floor Plate and Motor Neuron Induction by Different Concentrations of the Amino-Terminal Cleavage Product of Sonic Hedgehog Autoproteolysis", <i>Cell</i> 81: 445-455 (Exhibit 29);						
		Rowitch, D.H. et al. (1999) "Sonic hedgehog Regulates Proliferation and Inhibits Differentiation of CNS Precursor Cells", <i>J. Neurosci.</i> 19: 8954-8965 (Exhibit 30);						
		Ruiz i Altaba, A. (1999) "Gli Proteins and Hedgehog Signaling: Development and Cancer", <i>Trends Genet.</i> 15: 418-425 (Exhibit 31);						
		Sharma, K. et al. (1998) "LIM Homeodomain Factors Lhx3 and Lhx4 Assign Subtype Identities for Motor Neurons", <i>Cell</i> 95: 817-828 (Exhibit 32);						
		Smith, J.C. (1995) "Mesoderm-Inducing Factors and Mesodermal Patterning", <i>Curr. Opin. Cell Biol.</i> 7: 856-861 (Exhibit 33);						
		Tanabe, Y. et al. (1998) "Specification of Motor Neuron Identity by the MNR2 Homeodomain Protein", <i>Cell</i> 95: 67-80 (Exhibit 34);						
	✓	Wu, X. et al. (1998) "Two Distinct Mechanisms for Differential Positioning of Gene Expression Borders Involving the Drosophila Gap Protein Giant", <i>Development</i> 125: 3765-3774 (Exhibit 35);						
Am2		Horner et al. (2000) "Regenerating the Damaged Central Nervous System", 407: 963-970;						
EXAMINER Anne-Marie Jalk		DATE CONSIDERED 8/30/04						
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Am2	Jackowski (1995) "Neural Injury Repair" pp. 303-317;							
	Hamburger, V. et al. (1951) "A Series Of Normal Stages In The Development Of The Chick Embryo", <i>J. Morphol.</i> 88: 49-92;							
	Langman, J. et al. (1966) "Behavior of Neuroepithelial Cells During Closure Of The Neural Tube", <i>J. Comp. Neur.</i> 127: 399-411;							
	Leber, S.M. et al. (1995) "Migratory Paths Of Neurons And Glia In The Embryonic Chick Spinal Cord", <i>J. Neurosci.</i> 15: 1236-1248;							
	Muramatsu, T. et al. (1997) "Comparison Of Three Nonviral Transfection Methods For Foreign Gene Expression In Early Chicken Embryos In Ovo", <i>Biochem. Biophys. Res. Commun.</i> 230: 376-380;							
	Sander, M. et al. (2000) "Ventral Neural Patterning By Nkx Homeobox Genes: Nkx6.1 Controls Somatic Motor Neuron And Ventral Interneuron Fates", <i>Genes & Development</i> 14(17): 2134-2139;							
↓	Struhl, G. et al. (1992) "Control Of Drosophila Body Pattern By The hunchback Morphogen Gradient", <i>Cell</i> 69: 237-249;							
Am2	Yamada, T. et al. (1993) "Control Of Cell Pattern In The Neural Tube: Motor Neuron Induction By Diffusible Factors From Notochord And Floor Plate", <i>Cell</i> 73: 673-686;							
EXAMINER <i>Anne-Marie Zalk</i>		DATE CONSIDERED <i>8/30/04</i>						
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Am2		Basler, K. et al. (1993) "Control of cell pattern in the neural tube: Regulation of cell differentiation by dorsalin-1, a novel TGF beta family member", <i>Cell</i> 73: 687-702 (Exhibit 36);					
		Briscoe, J., and Ericson, J. (2001) "Specification of neuronal fates in the ventral neural tube", <i>Curr. Opin. Neurobiol.</i> 11: 43-49 (Exhibit 37);					
		Briscoe, J. et al. (2001) "A hedgehog-insensitive form of patched provides evidence for direct long-range patterning activity of Sonic hedgehog in the neural tube", <i>Molecular Cell</i> 7: 1279-1291 (Exhibit 38);					
		Cai, J. et al. (1999) "Expression and regulation of the chicken Nkx-6.2 homeobox gene suggest its possible involvement in the ventral neural patterning and cell fate specification", <i>Dev. Dyn.</i> 216: 459-468 (Exhibit 39);					
		Davis, C.A. et al. (1991) "Examining pattern formation in mouse, chicken and frog embryos with an En-specific antiserum", <i>Development</i> 111: 287-298 (Exhibit 40);					
		Eberhard, D. et al. (2000) "Transcriptional repression by Pax5 (BSAP) through interaction with corepressors of the Groucho family" <i>EMBO J.</i> 19: 2292-2303 (Exhibit 41);					
		Hoshiyama, D. et al. (1998) "Sponge Pax cDNA related to Pax-2/5/8 and ancient gene duplications in the Pax family", <i>J. Mol. Evol.</i> 47: 640-648 (Exhibit 42);					
		Jørgensen, M.C. et al. (1999) "Cloning and DNA-binding properties of the rat pancreatic beta-cell-specific factor Nkx6.1", <i>FEBS Lett.</i> 461: 287-294 (Exhibit 43);					
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Amz		Peters, T. et al. (2000) "Organization of mouse Iroquois homeobox genes in two clusters suggests a conserved regulation and function in vertebrate development", <i>Genome Res.</i> 10: 1453-62 (Exhibit 53);							
		Pierani, A. et al. (2001) "Control of interneuron fate in the developing spinal cord by the progenitor homeodomain protein Dbx1" <i>Neuron</i> 29: 367-384 (Exhibit 54);							
		Rolink, A.G. et al. (1999) "Long-term in vivo reconstitution of T-cell development by Pax5-deficient B-cell progenitors", <i>Nature</i> 401: 603-606 (Exhibit 55);							
		Schaeeren-Wiemers, N. and Gerfin-Moser, A. (1993) "A single protocol to detect transcripts of various types and expression levels in neural tissue and cultured cells: in situ hybridization using digoxigenin-labeled cRNA probes", <i>Histochemistry</i> 100: 431-440 (Exhibit 56);							
		Shoji, H. et al. (1996) "Regionalized expression of the Dbx family homeobox genes in the embryonic CNS of the mouse", <i>Mech. Dev.</i> 56: 25-39 (Exhibit 57);							
		Stanojevic, D., Small, S. and Levine, M. (1991) "Regulation of a segmentation stripe by overlapping activators and repressors in the Drosophila embryo", <i>Science</i> 254: 1385-1387 (Exhibit 58);							
v		Tanaka, M., Yamasaki, N., Izumo, S. (2000) "Phenotypic characterization of the murine Nkx2.6 homeobox gene by gene targeting", <i>Mol. Cell. Biol.</i> 20: 2874-2879 (Exhibit 59);							
Amz		Toresson, H., Potter, S.S. and Campbell, K. (2000) "Genetic control of dorsal-ventral identity in the telencephalon: opposing roles for Pax6 and Gsh2", <i>Development</i> 127: 4361-4371 (Exhibit 60);							
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